Amendments to the Claims:

This listing will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A brushless permanent magnet electrical machine which comprises:

a first cylindrical member having a central axis, an inner cylindrical surface and an outer cylindrical surface and a plurality of magnetic poles extending outward from the outer cylindrical surface of the first cylindrical member, the plurality of magnetic poles provided with wire coils around each of the plurality of magnetic poles;

a second cylindrical member having a central axis, an inner cylindrical surface and an outer cylindrical surface and a plurality of permanent magnets coupled to the inner cylindrical surface of the second cylindrical member, the second cylindrical member surrounding the first cylindrical member so that the plurality of magnet poles and the plurality of permanent magnets are adjacent and spaced apart from one another radially and the central axis of the second cylindrical member and the central axis of the first cylindrical member coincide and define a common central axis;

a rotatable shaft that is coaxial with the common axis; and

means for moving the second cylindrical member with respect to the first cylindrical member axially along the common central axis.

Claim 2 (Original): A brushless permanent magnet electrical machine according to claim 1, further comprising a housing that houses the first and second cylindrical members, the rotatable shaft being rotatably coupled to the housing, the first cylindrical member being held in a fixed position in the housing and the second cylindrical member being rotatable about the common central axis within the housing and axially movable within the housing.

Claim 3 (Original): A brushless permanent magnet electrical machine according to claim 2, wherein the second cylindrical member is coupled to the rotatable shaft by a constant velocity linear bearing.

Claim 4 (Original): A brushless permanent magnet electrical machine according to claim 1, wherein the means for moving the second cylindrical member with respect to the first cylindrical member comprises coacting threaded members including an axially fixed threaded member that is reversibly rotated and an axially movable threaded member that is prevented from rotating.

Claim 5 (Original): A brushless permanent magnet electrical machine according to claim 4, further including a motor for rotating the axially fixed threaded member that is reversibly rotated.

Claims 6-8 (Canceled)

Claim 9 (Original): A brushless permanent magnet electrical machine according to claim 1, wherein the first cylindrical member comprises a stator and the permanent magnet electrical machine comprises a motor.

Claim 10 (Original): A brushless permanent magnet electrical machine according to claim 1, wherein the permanent magnet electrical machine comprises one of a generator and an alternator.

Claim 11 (Original): A brushless permanent magnet electrical machine according to claim 1 in combination with a vehicle in which combination the brushless permanent magnet electrical machine drives the vehicle.

Claim 12 (Original): The combination of claim 11, wherein the vehicle includes a plurality of wheels and a brushless permanent magnet electrical machine according to claim 1 coupled to at least one of the plurality of wheels.

Claim 13 (Original): The combination of claim 12, comprising a brushless permanent magnet electrical machine coupled separately to each of the plurality of wheels.

Claim 14 (Original): A brushless permanent magnet electrical machine according to claim 1 in combination with a power generating system in which combination the brushless permanent magnet electrical machine comprises one of a generator and an alternator.

Claim 15 (Original): The combination of claim 14, wherein the power generating system comprises a wind powered system.

Claim 16 (Original): A brushless permanent magnet electrical machine according to claim 1 in combination with a marine craft, in which combination the rotatable shaft of the brushless permanent magnet electrical machine is coupled to means to propel the marine craft.

Claim 17 (Original): The combination of claim 16, wherein the means to propel the marine craft comprises a propeller.

Claim 18 (Original): The combination of claim 17, wherein the marine craft comprises a submersible marine craft.

Claim 19 (Currently amended): A motor vehicle comprising a plurality of wheels, at least one of said plurality of wheels coupled to a hub motor that comprises:

a stator having a central axis, an inner cylindrical surface and an outer cylindrical surface and a plurality of magnetic poles extending outward from the outer cylindrical surface of the stator, the plurality of magnetic poles provided with wire coils around each of the plurality of magnetic poles;

a rotator having a central axis, an inner cylindrical surface and an outer cylindrical surface and a plurality of permanent magnets coupled to the inner cylindrical surface of the rotator, the rotator surrounding the stator so that the plurality of magnet poles and the plurality of permanent magnets are adjacent and spaced apart from one another radially and the central axis of the rotor and the central axis of the stator coincide and define a common central axis;

a rotatable shaft that is coaxial with the common axis; and

means for moving the rotor with respect to the stator axially along the common central axis.

Claim 20 (Original): A motor vehicle according to claim 19, comprising a plurality of the hub motors and wherein two or more of the plurality of wheels are coupled to a separate ones of the plurality of hub motors.

Claim 21 (Original): A motor vehicle according to claim 19, further comprising a housing that houses the stator and rotor, the rotatable shaft being rotatably coupled to the housing, the stator being held in a fixed position in the housing and the rotor being rotatable about the common

central axis within the housing and axially movable within the housing.